

### **ABSTRACT**

The present invention relates to a composite structure which is capable of use as a filter medium and a method for producing the same. The composite structure contains at least a first nonwoven layer, said first layer having a first surface and a second surface, as well as a rigidifying or stiffening component. The rigidifying component is applied in semi-molten state to the one surface of the nonwoven layer and provides sufficient stiffness and/or resilience to the composite such that the composite is self-pleatable yet retains flexibility. The rigidifying or stiffening component may be filaments of a polymer or polymer blend or alternatively the rigidifying or stiffening component may also be a wax or wax blend.